# Hesperiidae of Vietnam 4 A new species and a new subspecies of *Pintara* EVANS, 1932 from Vietnam, with notes on the genus

(Lepidoptera: Hesperiidae) by A. L. DEVYATKIN

# Summary

Pintara capiloides spec. nov., from Central Vietnam, and P. bowringi colorata subspec. nov., from North Vietnam, are described and figured. The new species has no close affinities within the genus; peculiar morphological characters (especially a costal fold, which is a new character for the genus Pintara) make it externally similar to the genus Capila Moore, 1865. A preliminary synopsis of Pintara species is provided.

Amongst the Hesperiidae material collected by Dr. A. L. Monastyrskii in North and Central Vietnam in 1996–1997 three specimens of the genus *Pintara* have been found, two of which proved to belong to a hitherto undescribed species, and the third one is described below as a new subspecies of *P. bowringi* (Joicey & Talbot, 1921), which is considered a distinct species due to marked differences from *P. tabrica* (Hewitson, [1873]).

The type specimens of the new taxa are kept in the collection of the Department of Entomology, Moscow State University.

Terminology of wing venation, external morphology and genitalia is given following Evans (1949).

## Pintara capiloides spec. nov.

(colour plate, figs. 7, 8)

Holotype ♂: Central Vietnam, Binh Tri Thien Province, Bach Ma National Park, 25.VII.1996, A. MoNastyrskii leg.

Paratype ♂: Central Vietnam, Ha Tinh Province, Vu Quang Nature Reserve, 600 m, 9.VIII.1997, A. Monastyrskii leg.

#### Description

Palpi almost erect; 2nd segment below pale yellow, with black hairs on its outer ventral edge; above black with few yellowish scales; 3rd segment thin and protruding, dark brown. Antennae longer than half of the costa, uniform brown from both sides; apiculus obtuse, nudum 20.

Forewing: length 24–25 (holotype) mm. Costal fold developed. Apex pointed. Upperside: ground colour brown with very faint violet gloss; thin yellow hairs at wing base; 9 hyaline white discal spots of subequal size, arranged in a continuous row, which is slightly S-shaped in the subapical area (spaces 5 to 8), and from space 5 towards dorsum forming a straight line placed close to the termen. No cell spot; instead, most part of the wing, from the base to the discal spots, is occupied by long white hyaline stripes which are found in every space from 1b to 11, including cell; these stripes are bifurcate in spaces 2 and 3 and exhibit a tendency to bifurcation in spaces 6 to 8; two stripes in cell and three stripes in space 1b, the latter being less clearly defined than the others.

Underside: ground colour the same as on the upperside; space 1a and base of space 1b pale yellow; hyaline pattern sharply defined; faint and diffuse pale submarginal markings from space 1b almost to the apex.

Hindwing conspicuously angled at veins 3 and 8. Upperside: ground colour brown as on forewing,

gradually becoming fainted towards dorsum and tornus, which are broadly orange-yellow; base of wing covered with more or less dense orange-yellow hairs; veins dark brown; diffuse patches of dark ground colour in spaces 1b, 1c, 7 and in cell; a series of black elongate spots in spaces 1c to 7, sharply defined in spaces 1c-3 and diffuse and pale-ringed in spaces 4-7; smaller dark marginal spots at ends of veins 1b to 5.

Underside: most part of the wing pale orange-yellow, the dark ground colour remaining only at the costa, the apical part of the termen and along the veins; all dark markings the same as on the upperside but more sharply defined; a diffuse dark brown spot in the cell, continued towards base in the shape of a double line; elongate markings in spaces 6 and 7 ringed pale yellow. The remains of cilia (unfortunately both specimens are in worn condition) seem to be brown on both wings, except dorsal half of the hindwing where they are orange-yellow. Body above brown, abdomen striped yellow at the ends of the segments; body below and legs orange-yellow; hind tibiae with a recumbent hair tuft.

σ'-genitalia (figs. 1A–D). Uncus relatively short (slightly shorter than tegumen) and curved, slightly expanded near the middle, with a ventral projection; its distal part tapered and bluntly cut. Gnathos long, almost equal to uncus in length, more or less evenly tapered, blunt-ended. Clasp deeply bifid, as in other *Pintara* species; costal lobe (harpe) broad and long, reaching the end of the cuiller, distally cut and curved upwards; its distal and ventral edges finely serrate; cuiller broad, cut straight and sharp-angled; its distal side with a small tooth at the middle. Aedeagus relatively short, irregularly curved, with a long curved process not far from the distal end; pars inflabilis with two curved cornuti.

The general appearance of the new species is striking: the combination of hyaline stripes and small and detached discal spots on the forewing, together with the yellow-coloured hindwing with black spots, creates a peculiar pattern, never found in any other hesperiid species and bearing a remote resemblance to *Capila lidderdali* (ELWES, 1888).

The new species seems to have no close affinities within the genus, although wing pattern and general construction of the male genitalia leave no doubt in its generic status. There is a little theoretical probability that this species may prove to be the missing male of the enigmatic taxon *melli* (HERING, 1918), which was described as a subspecies of *Capila lidderdali* (ELWES, 1888) after a single female from S. E. China and was later treated by EVANS (1949) as a subspecies of *Pintara tabrica* (HEWITSON, [1873]). More probable relations of taxa within the genus *Pintara*, however, seem to be different and are discussed below.

Pintara bowringi colorata subspec. nov. (colour plate, figs. 9, 10)

Holotype &: North Vietnam, Vinh Phu Province, Tam Dao, 200 m, 26.X.1996, A. Monastyrskii leg.

#### Description

Palpi: 2nd segment below white, with black hairs on its outer ventral edge; above black; 3rd segment thin and protruding, black. Antennae dark brown (a single damaged antenna remained).

Wings more or less rounded. Forewing: length 21.5 mm. Upperside: ground colour dark brown to almost black, with a conspicuous violet-blue gloss; scarce yellow hairs at wing base; a small rounded white dot instead of cell spot on the right wing, and obscure traces of it on the left wing; 5 subapical white spots in spaces 4 to 8; discal spots in spaces 2 and 3 relatively large, triangular and placed slightly nearer to the cell than the 2 smaller spots in space 1b, which are in a line with the spots in spaces 4 and 5. All spots hyaline white; in the basal half of the wing there are also long hyaline stripes in space 11 and in the cell, along its lower margin; two long hyaline stripes in space 2; a short V-shaped hyaline mark in space 3; and a short streak in space 4. Cilia dark brown.

Underside: ground colour the same as on the upperside, slightly paler towards apex and dorsum, with faint bluish gloss; space 1a and base of space 1b yellow. All hyaline markings the same as on the upperside; traces of subhyaline pale streaks also in spaces 1b and 7 to 10; a series of white

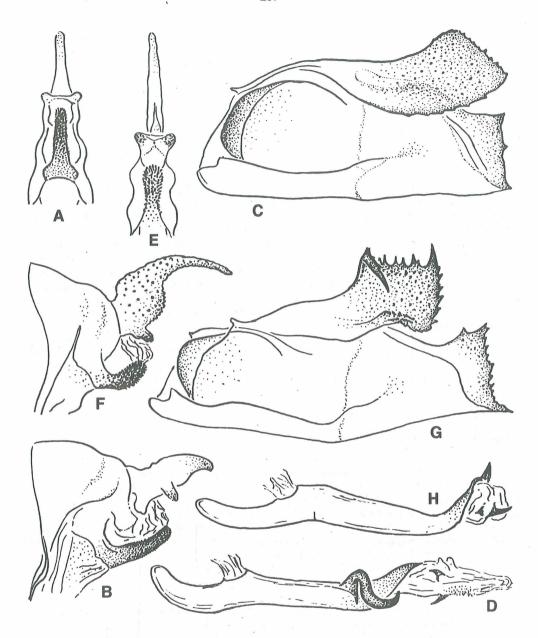


Fig. 1: male genitalia. A–D: *Pintara capiloides* spec. nov., A – uncus and gnathos (ventral view), B – ibid. (lateral view), C – right clasp (from inside), D – aedeagus (lateral view). E–H: *Pintara bowringi colorata* subspec. nov., E – uncus and gnathos (ventral view), F – ibid. (lateral view), G – right clasp (from inside), H – aedeagus (lateral view).

submarginal spots from space 1b to 5; these are large and sharply defined near the dorsum and become smaller and diffuse towards the apex. Cilia dirty brownish, rather paler than the ground colour.

Hindwing: dorsal half of the wing broadly orange-yellow, the dark ground colour remaining only at the base, along the costa and in the upper part of the termen, mostly being covered with yellow hairs and scales; a diffuse round black spot in the cell; a row of elongate black spots also in spaces 1c to 7; triangular black marginal markings at the ends of veins 1b to 4; termen dark brown from vein 5 to costa. Underside: base of wing and costa densely suffused with whitish scales; ground colour pale orange-yellow; all black markings the same as on the upperside but sharply defined; wing margin from vein 5 to costa broadly black; an elongate black spot near the base of space 7; ground colour of spaces 6 and 7 (at bases and between black spots and termen) almost white. Cilia orange-yellow from dorsum to vein 6, black with few yellow scales from vein 6 to the costa. Body and legs below yellow.

ở-genitalia (figs. 1E−H). Uncus relatively long (longer than tegumen) and curved, roughly punctured throughout and covered with small tuberculi, especially at the ventral side; its basal part expanded, with a conspicuous ventral projection; the distal part thin and evenly tapered (all in lateral view). Gnathos short, expanded and rounded at the distal end (ventral view). Clasps slightly asymmetric, deeply bifid; the costal lobe (harpe) broad, almost quadratic in the distal part, roughly serrate dorsally and distally, with a long and thin dorsal process, which is curved inwards; cuiller longer and slightly wider than the harpe; its distal edge cut almost straight, sharply angled and serrate, slightly more produced ventrally than dorsally. Aedeagus slender, its proximal and distal ends curved upwards, with a distal horn and two unequal cornuti on pars inflabilis.

The new subspecies differs from the nominate *P. bowringi*, so far only known from Hainan, in its reduced cell spot and the much better developed hyaline stripes on the forewing, a stronger developed orange-yellow colouration of the hindwing upperside, extending to the dorsum, and a less patchy and more clear pattern of the hindwing underside. In male genitalia the main difference is the sharply angled dorso-distal edge of the cuiller in the new subspecies (rounded in the nominate *bowringi*). In view of these differences, the possibility cannot be excluded that it may prove to be a distinct species.

## Discussion

The two species previously known in the genus *Pintara* were (as arranged by Evans, 1949): *P. pinwilli* (Butler, [1879]), with ssp. banga Evans, 1949 and *P. tabrica* (Hewitson, [1873]), with sspp. melli (Hering, 1918) and bowringi (Joicey & Talbot, 1921).

While *P. pinwilli* appears to be a well characterized species, distributed from S. Burma to Sumatra and Borneo (found in S. Vietnam by INOUE & KAWAZOE, 1964), the relations within the *tabrica*-group remain a taxonomic problem, because the number of specimens of all the taxa included is extremely small and insufficient for an adequate comparison.

The nominate *P. tabrica* is only known with certainty from S. Vietnam: although the type was reported to come from Darjeeling, Evans (1949) suggested that its probable type-locality was Indo-China and recorded another specimen from Laokai (Cochin-China).

P. bowringi, which I consider a good species, has been so far known only from Hainan, the recently described Celaenorrhinus choui Gu (in Chou, 1994) being clearly conspecific. The discovery of the new subspecies extends its distribution to the continent and makes it rather possible that another conspecific taxon may prove to be melli, described from Tsha-jiu-san (S. E. China) after a single female specimen (Hering, 1918). Judging from the photographs accompanying the original description, the insect is very similar to P. bowringi, differing from it in the larger size of the forewing cell and discal white spots, which are therefore situated closer together. However, Evans' definition of bowringi ("Uph and unh as melli. Upf central spots small, widely separated, cell spot not reaching across cell") is obviously based on the male holotype; the two females examined have spots much wider, thus representing a transition to melli. Further specimens, especially males, from the type area of melli can clarify the matter; if conspecificity is confirmed, Hering's name should have priority.

Thus, a tentative synopsis of the taxa within the genus *Pintara* can be summarized as follows:

Pintara capiloides DEVYATKIN, spec. nov. - C. Vietnam

P. bowringi bowringi (JOICEY & TALBOT, 1921)

(= choui Gu, 1994, syn. nov.) - Hainan

bowringi colorata Devyatkin, subspec. nov. - N. Vietnam

P. melli (HERING, 1918) (bona spec.?) - S. E. China

P. tabrica (Hewitson, [1873]) - S. Vietnam

P. pinwilli pinwilli (BUTLER, [1879]) – S. Burma, S. Thailand, S. Vietnam, the Malay Peninsula pinwilli banga EVANS, 1949 – Borneo, Sumatra

Within the above listed taxa of the genus *Pintara*, external features (i.e. extent of hyaline striping, arrangement of spots and development of orange coloration) show a clearly defined gradation from the most striped and dull-coloured *P. capiloides* to the bright and large-spotted *P. pinwilli*.

The genus *Pintara* was placed by Evans (1949) in the *Tagiades* group, characterized by porrect palpi and, among other characters, by the absence of a costal fold (only found in the Australian genus *Netrocoryne* Felder, 1867). Peculiar characters of *P. capiloides*, otherwise well matching the generic characters of *Pintara*, seem to complicate the situation within Pyrgine genera, making this genus in some respects related to the *Celaenorrhinus* group (sensu Evans, 1949).

## Acknowledgements

My sincere thanks are due to Dr. A. L. Monastyrskii (Russian-Vietnam Tropical Centre, Hanoi) for supplying me with very valuable material, and to Mr. P. R. Ackery (The Natural History Museum, London) for his kind help in examination of *Pintara* type specimens.

#### References

- Butler, A. G. [1879]: The butterflies of Malacca. Trans. linn. Soc. Lond., (2) Zool. 1 (8): 533–568, pl. 68, 69.
- CHOU Io (Ed.) (1994): Monographia Rhopalocerorum Sinensium. Henan Sci. and Technol. Publishing House. Vol. 2, 854 pp., ill.
- Evans, W. H. (1949): A catalogue of the Hesperiidae from Europe, Asia and Australia in the British Museum (Natural History). Trust. Brit. Mus., London, 502 pp., 53 pls.
- HERING, M. (1918): Neue Hesperiiden aus China. Mitt. Zool. Mus. Berlin 9 (1): 51–59, Taf. 4.
- Hewitson, W. C. [1873] (1852–1877): Illustrations of new species of exotic butterflies, selected chiefly from the collections of W. Wilson Saunders and William C. Hewitson. London, Van Voorst. Vol. 5, iv+[127] pp., 60 pls. [1872–1877].
- INOUE, S. & A. KAWAZOE (1964): Hesperiid butterflies from South Vietnam (2). Tyo to Ga 15 (4): 84–105.
- JOICEY, J. J. & G. TALBOT (1921): Descriptions of new forms of Lepidoptera from the island of Hainan.

   Bull. Hill Mus. 1(1): 167–177, pls. 19–24.

# Explanation of the colour plate

DEVYATKIN, A. L.: Hesperiidae of Vietnam 3. A new species of *Celaenorrhinus* HÜBNER, 1819 from Vietnam, with revisional notes on the *C. aurivittata* (MOORE, 1879) group (Lepidoptera: Hesperiidae). — Neue Entomologische Nachrichten **41**:289–294.

Fig. 1: Celaenorrhinus vietnamicus spec. nov., holotype ♂, N. Vietnam, Ha Tay Province, Ba Vi, 19.VIII.1993, A. BARANOV leg., upperside.

Fig. 2: as fig. 1, underside.

Fig. 3: Celaenorrhinus aurivittata (MOORE, 1879) ♂, Thailand, Yala, 28.X.1980, J. HYATT leg. (?), upperside.

Fig. 4: as fig. 3, underside.

Fig. 5: Celaenorrhinus cameroni (DISTANT, 1882) 3, Thailand, Chanthaburi, 13.III.1984, J. HYATT leg (?), upperside.

Fig. 6: as fig. 5, underside.

DEVYATKIN, A. L.: Hesperiidae of Vietnam 4. A new species and a new subspecies of *Pintara* EVANS, 1932 from Vietnam, with notes on the genus (Lepidoptera: Hesperiidae). – Neue Entomologische Nachrichten 41:295–301.

Fig. 7: Pintara capiloides spec. nov., holotype &, C. Vietnam, Binh Tri Thien Provience, Bach Ma National Park, 25.VII.1996, A. Monastyrskii leg., upperside.

Fig. 8: as fig. 7, underside.

Fig. 9: *Pintara bowringi colorata* subspec. nov., holotype ♂, N. Vietnam, Vinh Phu Province, Tam Dao, 200 m, 26.X. 1996, A. Monastyrskii leg., upperside.

Fig. 10: as fig. 9, underside.

1	2
3	4
5	6
7	8
9	10

Address of the author

ALEXEY L. DEVYATKIN
Department of Entomology
Faculty of Biology
Moscow State University
119899 Moscow, Russia

